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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,409	09/23/2004	Christoph Gerard August Hoelen	NL 020264	8032
24737 7590 01/24/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER LEE, Y MY QUACH	
			ART UNIT 2885	PAPER NUMBER
			MAIL DATE 01/24/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/509,409

Applicant(s)

HOELEN ET AL.

Examiner

Lee Y Quach

Art Unit

2885

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-20 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7-9 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION***Response to Arguments***

1. Applicant's arguments filed October 31, 2007 have been considered. However, upon further consideration, a new ground of rejection is made in view of Osumi (JP 2001-281456).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 7, 8, 13, 15 and 16 are rejected under 35 U.S.C. 102(a) as being anticipated by Osumi (JP 2001-281456, prior art previously cited).

Osumi shows a light emitting panel (14, figure 2) comprising a front wall (14B), a rear wall (14C) situated opposite to the front wall, a first edge surface (14A) being light transmitted, a second edge surface (14F) opposite the first edge surface such that the second edge surface is reflecting with respect to light inside the panel, the surface of the second edge surface having a specularly or diffusely reflecting material (17), a ratio of the surface area S_1 of the first edge (the vertical surface area of the first edge) and the largest cross section S_{1sc} (the largest vertical cross section of the second edge) in the light emitting panel substantially parallel to the first edge surface satisfying the relation $1 < S_{1sc}/S_1 < 10$ (figure 2, the largest vertical cross section of the second edge is about 3 times larger than the first vertical surface area, the ratio is 3 to 1 which is within the ratio as claimed), at least a first light source (15) associated with the first edge surface, the light source comprising at least two light emitting diodes with different light emission wavelengths (15A, 15B), light originating from the first light source incident on the first edge surface and distributed in the panel, the panel widens over a widening section from the first edge surface in a direction towards the second edge surface (figure 2A and 2B), the rear wall provided over the widening section with a plurality of steps (14E) of which a surface facing the front wall is substantially parallel to the front wall, a further surface (14D) of the steps making an angle (θ_1) of 45 degrees with respect to a normal on the

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front wall which is within the range of $48 < \beta < 48$, and a display device comprising a liquid crystal display (LCD 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osumi (JP 2001-281456, prior art previously cited).

Osumi discloses the invention substantially as claimed with the exception of having the ratio as claimed in 3.

It would have been obvious to one skilled in the art to include Osumi with the ratio as claimed so that light can be optimally conducted within the light emitting panel to evenly distribute and enhance the light qualities across the light emitting surface, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skilled in the art. *In re Aller*, 105 USPQ 233.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osumi (JP 2001-281456, prior art previously cited) in view of Lammers (prior art previously cited).

Osumi discloses the invention substantially as claimed with the exception of having the front wall provided with a translucent diffuser.

Lammers teaches that it is known in the art to have the front wall provided with a translucent diffuser.

It would have been obvious to one skilled in the art to provide the front wall of Osumi with a translucent diffuser, as shown by Lammers, to diffuse and uniform the light coupled out from wall.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osumi (JP 2001-281456, prior art previously cited) in view of Lammers (prior art previously cited).

Osumi discloses the invention substantially as claimed with the exception of having the light emitting diode at least 5 lm.

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Lammers teaches that it is known in the art to use light emitting diode having at least 5 lm (column 9, lines 2 to 3) in light emitting panel display device.

It would have been obvious to one skilled in the art to provide the light emitting diode of Osumi with at least 5 lm, as shown by Lammers, for the advantage of enabling the light to be coupled into the light emitting panel with a higher efficiency, hardly emitting heat as well as issuing detrimental radiation, and to overall provide a compact illumination system.

7. Claims 10 to 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


8. Claims 17 to 20 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y Quach Lee whose telephone number is 571-272-2373. The examiner can normally be reached on Monday to Thursday from 8:30 am to 2:30 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service 571-272-2815.

Y. Q.
January 17, 2008


Y Quach Lee
Primary Examiner
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